STIC Biotechnology Systems Branch

RAW SEQUENCE LISTING
ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: _10/590,464_
Source: _IFwP_
Date Processed by STIC: _9/1/06_

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:
1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY
FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT
MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE **CHECKER VERSION 4.4.0 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:
> **http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm**

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.
Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.
Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05): U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314

Revised 01/10/06

Raw Sequence Listing Error Summary

ERROR DETECTED	SUGGESTED CORRECTION	SERIAL NUMBER: _10/590,464_

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

1____Wrapped Nucleics
·Wrapped Aminos — The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."

2 ✓ Invalid Line Length — The rules require that a line not exceed 72 characters in length. This includes white spaces.

3____Misaligned Amino Numbering — The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.

4____Non-ASCII — The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.

5____Variable Length — Sequence(s)____contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.

6____PatentIn 2.0 "bug" — A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.

7____Skipped Sequences (OLD RULES) — Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence:
(2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
(i)   SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
This sequence is intentionally skipped
Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.

.8____Skipped Sequences (NEW RULES) — Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence.
<210> sequence id number
<400> sequence id number
000

9____Use of n's or Xaa's (NEW RULES) — Use of n's and/or Xaa's have been detected in the Sequence Listing.
Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.

10____Invalid <213> Response — Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence. (see item 11 below)

11____Use of <220> — Sequence(s) ___ missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section or use "chemically synthesized" as explanation. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32), also Sec. 1.823 of Sequence Rules

12____PatentIn 2.0 "bug" — Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.

13____ Misuse of n/Xaa — "n" can only represent a single nucleotide; "Xaa" can only represent a single amino acid

IFWP

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/590,464

DATE: 09/01/2006
TIME: 11:33:27

Input Set : A:\PTO.RJ.txt
Output Set: N:\CRF4\09012006\J590464.raw

see item 2 on Error Summary Sheet

3 <110> APPLICANT: Kihara Memorial Yokohama Foundation for the Advancement of Life Sciences
4   City of Yokohama
6 <120> TITLE OF INVENTION: TRF2 DNA-binding domain mutant proteins, telomeric DNA mutants, and use
7   of a structure of a complex between a TRF2 DNA binding domain and a double-
8   stranded DNA molecule
10 <130> FILE REFERENCE: FP-047PCT
C--> 12 <140> CURRENT APPLICATION NUMBER: US/10/590,464
C--> 13 <141> CURRENT FILING DATE: 2006-08-23
15 <150> PRIOR APPLICATION NUMBER: JP P2004-046238
16 <151> PRIOR FILING DATE: 2004-02-23

see pp 3-6

18 <160> NUMBER OF SEQ ID NOS: 29
20 <170> SOFTWARE: PatentIn version 3.1
22 <210> SEQ ID NO: 1
23 <211> LENGTH: 189
24 <212> TYPE: DNA
25 <213> ORGANISM: Homo sapiens
27 <220> FEATURE:
28 <221> NAME/KEY: CDS
29 <222> LOCATION: (1)..(189)
30 <223> OTHER INFORMATION:

Does Not Comply Corrected Diskette Needed

W--> 32 <400> 1
33 gaa gac agt aca acc aat ata aca aaa aag cag aag tgg act gta gaa   48
34 Glu Asp Ser Thr Thr Asn Ile Thr Lys Lys Gln Lys Trp Thr Val Glu
35 1   5   10   15
37 gaa agc gag tgg gtc aag gct gga gtg cag aaa tat ggg gaa gga aac   96
38 Glu Ser Glu Trp Val Lys Ala Gly Val Gln Lys Tyr Gly Glu Gly Asn
39   20   25   30
41 tgg gct gcc att tct aaa aat tac cca ttt gtt aac cga aca gct gtg   144
42 Trp Ala Ala Ile Ser Lys Asn Tyr Pro Phe Val Asn Arg Thr Ala Val
43   35   40   45
45 atg att aag gat cgc tgg cgg acc atg aaa aga ctt ggc atg aac   189
46 Met Ile Lys Asp Arg Trp Arg Thr Met Lys Arg Leu Gly Met Asn
47 :   50   55   60
50 <210> SEQ ID NO: 2
51 <211> LENGTH: 63
52 <212> TYPE: PRT
53 <213> ORGANISM: Homo sapiens
55 <400> SEQUENCE: 2
57 Glu Asp Ser Thr Thr Asn Ile Thr Lys Lys Gln Lys Trp Thr Val Glu
58 1   5   10   15
61 Glu Ser Glu Trp Val Lys Ala Gly Val Gln Lys Tyr Gly Glu Gly Asn
62   20   25   30

65 Trp Ala Ala Ile Ser Lys Asn Tyr Pro Phe Val Asn Arg Thr Ala Val

RAW SEQUENCE LISTING   DATE: 09/01/2006
PATENT APPLICATION: US/10/590,464   TIME: 11:33:27

Input Set : A:\PTO.RJ.txt
Output Set: N:\CRF4\09012006\J590464.raw

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 69 Met Ile Lys Asp Arg Trp Arg Thr Met Lys Arg Leu Gly Met Asn
 70     50                  55              60
 73 <210> SEQ ID NO: 3
 74 <211> LENGTH: 189
 75 <212> TYPE: DNA
 76 <213> ORGANISM: Artificial
 78 <220> FEATURE:
 79 <223> OTHER INFORMATION: synthetic DNA
 81 <220> FEATURE:
 82 <221> NAME/KEY: CDS
 83 <222> LOCATION: (1)..(189)
 84 <223> OTHER INFORMATION:
W--> 86 <400> 3
 87 gaa gac agt aca acc aat ata aca aaa agg cag aag tgg act gta gaa      48
 88 Glu Asp Ser Thr Thr Asn Ile Thr Lys Arg Gln Lys Trp Thr Val Glu
 89 1               5                   10                  15
 91 gaa agc gag tgg gtc aag gct gga gtg cag aaa tat ggg gaa gga aac      96
 92 Glu Ser Glu Trp Val Lys Ala Gly Val Gln Lys Tyr Gly Glu Gly Asn
 93             20                  25              30
 95 tgg gct gcc att tct aaa aat tac cca ttt gtt aac cga aca gct gtg     144
 96 Trp Ala Ala Ile Ser Lys Asn Tyr Pro Phe Val Asn Arg Thr Ala Val
 97         35                  40                  45
 99 atg att aag gat cgc tgg cgg acc atg aaa aga ctt ggc atg aac        189
100 Met Ile Lys Asp Arg Trp Arg Thr Met Lys Arg Leu Gly Met Asn
101     50                  55              60
104 <210> SEQ ID NO: 4
105 <211> LENGTH: 63
106 <212> TYPE: PRT
107 <213> ORGANISM: Artificial
109 <220> FEATURE:
110 <223> OTHER INFORMATION: synthetic DNA
112 <400> SEQUENCE: 4
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115 1               5                   10                  15
118 Glu Ser Glu Trp Val Lys Ala Gly Val Gln Lys Tyr Gly Glu Gly Asn
119             20                  25              30
122 Trp Ala Ala Ile Ser Lys Asn Tyr Pro Phe Val Asn Arg Thr Ala Val
123         35                  40                  45
126 Met Ile Lys Asp Arg Trp Arg Thr Met Lys Arg Leu Gly Met Asn
127     50                  55              60
130 <210> SEQ ID NO: 5
131 <211> LENGTH: 189
132 <212> TYPE: DNA
133 <213> ORGANISM: Artificial
135 <220> FEATURE:
136 <223> OTHER INFORMATION: synthetic DNA
138 <220> FEATURE:
139 <221> NAME/KEY: CDS
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this is not a DNA sequence

RAW SEQUENCE LISTING DATE: 09/01/2006
PATENT APPLICATION: US/10/590,464 TIME: 11:33:27

Input Set : A:\PTO.RJ.txt
Output Set: N:\CRF4\09012006\J590464.raw

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140 <222> LOCATION: (1)..(189)
141 <223> OTHER INFORMATION:
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146 1               5                   10                  15
148 gaa agc gag tgg gtc aag gct gga gtg cag aaa tat ggg gaa gga aac     96
149 Glu Ser Glu Trp Val Lys Ala Gly Val Gln Lys Tyr Gly Glu Gly Asn
150             20                  25                  30
152 tgg tct gcc att tct aaa aat tac cca ttt gtt aac cga aca gct gtg     144
153 Trp Ser Ala Ile Ser Lys Asn Tyr Pro Phe Val Asn Arg Thr Ala Val
154         35                  40                  45
156 atg att aag gat cgc tgg cgg acc atg aaa aga ctt ggc atg aac     189
157 Met Ile Lys Asp Arg Trp Arg Thr Met Lys Arg Leu Gly Met Asn
158     50                  55                  60
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162 <211> LENGTH: 63
163 <212> TYPE: PRT
164 <213> ORGANISM: Artificial
166 <220> FEATURE:
167 <223> OTHER INFORMATION: synthetic DNA        not a DNA sequence
169 <400> SEQUENCE: 6
171 Glu Asp Ser Thr Thr Asn Ile Thr Lys Lys Gln Lys Trp Thr Val Glu
172 1               5                   10                  15
175 Glu Ser Glu Trp Val Lys Ala Gly Val Gln Lys Tyr Gly Glu Gly Asn
176             20                  25                  30
179 Trp Ser Ala Ile Ser Lys Asn Tyr Pro Phe Val Asn Arg Thr Ala Val
180         35                  40                  45
183 Met Ile Lys Asp Arg Trp Arg Thr Met Lys Arg Leu Gly Met Asn
184     50                  55                  60
187 <210> SEQ ID NO: 7
188 <211> LENGTH: 189
189 <212> TYPE: DNA
190 <213> ORGANISM: Artificial
192 <220> FEATURE:
193 <223> OTHER INFORMATION: synthetic DNA
195 <220> FEATURE:
196 <221> NAME/KEY: CDS
197 <222> LOCATION: (1)..(189)
198 <223> OTHER INFORMATION:
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201 gaa gac agt aca acc aat ata aca aaa aag cag aag tgg act gta gaa     48
202 Glu Asp Ser Thr Thr Asn Ile Thr Lys Lys Gln Lys Trp Thr Val Glu
203 1               5                   10                  15
205 gaa agc gag tgg gtc aag gct gga gtg cag aaa tat ggg gaa gga aac     96
206 Glu Ser Glu Trp Val Lys Ala Gly Val Gln Lys Tyr Gly Glu Gly Asn
207             20                  25                  30
209 tgg gct gcc att tct aaa aat tac cca ttt gtt aac cga aca tct gtg     144
210 Trp Ala Ala Ile Ser Lys Asn Tyr Pro Phe Val Asn Arg Thr Ser Val
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RAW SEQUENCE LISTING   DATE: 09/01/2006
PATENT APPLICATION: US/10/590,464   TIME: 11:33:27

Input Set : A:\PTO.RJ.txt
Output Set: N:\CRF4\09012006\J590464.raw

```
211         35                  40                  45
213 atg att aag gat cgc tgg cgg acc atg aaa aga ctt ggc atg aac        189
214 Met Ile Lys Asp Arg Trp Arg Thr Met Lys Arg Leu Gly Met Asn
215      50                  55                  60
218 <210> SEQ ID NO: 8
219 <211> LENGTH: 63
220 <212> TYPE: PRT
221 <213> ORGANISM: Artificial
223 <220> FEATURE:
224 <223> OTHER INFORMATION: synthetic DNA
226 <400> SEQUENCE: 8
228 Glu Asp Ser Thr Thr Asn Ile Thr Lys Lys Gln Lys Trp Thr Val Glu
229 1            5                  10                  15
232 Glu Ser Glu Trp Val Lys Ala Gly Val Gln Lys Tyr Gly Glu Gly Asn
233           20                  25                  30
236 Trp Ala Ala Ile Ser Lys Asn Tyr Pro Phe Val Asn Arg Thr Ser Val
237           35                  40                  45
240 Met Ile Lys Asp Arg Trp Arg Thr Met Lys Arg Leu Gly Met Asn
241      50                  55                  60
244 <210> SEQ ID NO: 9
245 <211> LENGTH: 189
246 <212> TYPE: DNA
247 <213> ORGANISM: Artificial
249 <220> FEATURE:
250 <223> OTHER INFORMATION: synthetic DNA
252 <220> FEATURE:
253 <221> NAME/KEY: CDS
254 <222> LOCATION: (1)..(189)
255 <223> OTHER INFORMATION:
W--> 257 <400> 9
258 gaa gac agt aca acc aat ata aca aaa aag cag aag tgg act gta gaa         48
259 Glu Asp Ser Thr Thr Asn Ile Thr Lys Lys Gln Lys Trp Thr Val Glu
260 1            5                  10                  15
262 gaa agc gag tgg gtc aag gct gga gtg cag aaa tat ggg gaa gga aac         96
263 Glu Ser Glu Trp Val Lys Ala Gly Val Gln Lys Tyr Gly Glu Gly Asn
264           20                  25                  30
266 tgg gct gcc att tct aaa aat tac cca ttt gtt aac cga aca gct gtg        144
267 Trp Ala Ala Ile Ser Lys Asn Tyr Pro Phe Val Asn Arg Thr Ala Val
268           35                  40                  45
270 atg att aag gat cgc tgg cgg acc atg aaa aag ctt ggc atg aac        189
271 Met Ile Lys Asp Arg Trp Arg Thr Met Lys Lys Leu Gly Met Asn
272      50                  55                  60
275 <210> SEQ ID NO: 10
276 <211> LENGTH: 63
277 <212> TYPE: PRT
278 <213> ORGANISM: Artificial
280 <220> FEATURE:
281 <223> OTHER INFORMATION: synthetic DNA
283 <400> SEQUENCE: 10
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RAW SEQUENCE LISTING   DATE: 09/01/2006
PATENT APPLICATION: US/10/590,464   TIME: 11:33:27

Input Set : A:\PTO.RJ.txt
Output Set: N:\CRF4\09012006\J590464.raw

```
285 Glu Asp Ser Thr Thr Asn Ile Thr Lys Lys Gln Lys Trp Thr Val Glu
286 1               5                   10                  15
289 Glu Ser Glu Trp Val Lys Ala Gly Val Gln Lys Tyr Gly Glu Gly Asn
290             20                  25                  30
293 Trp Ala Ala Ile Ser Lys Asn Tyr Pro Phe Val Asn Arg Thr Ala Val
294         35                  40                  45
297 Met Ile Lys Asp Arg Trp Arg Thr Met Lys Lys Leu Gly Met Asn
298     50                  55                  60
301 <210> SEQ ID NO: 11
302 <211> LENGTH: 189
303 <212> TYPE: DNA
304 <213> ORGANISM: Artificial
306 <220> FEATURE:
307 <223> OTHER INFORMATION: synthetic DNA
309 <220> FEATURE:
310 <221> NAME/KEY: CDS
311 <222> LOCATION: (1)..(189)
312 <223> OTHER INFORMATION:
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W-->
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314 <400> 11
315 gaa gac agt aca acc aat ata aca aaa agg cag aag tgg act gta gaa        48
316 Glu Asp Ser Thr Thr Asn Ile Thr Lys Arg Gln Lys Trp Thr Val Glu
317 1               5                   10                  15
319 gaa agc gag tgg gtc aag gct gga gtg cag aaa tat ggg gaa gga aac        96
320 Glu Ser Glu Trp Val Lys Ala Gly Val Gln Lys Tyr Gly Glu Gly Asn
321             20                  25                  30
323 tgg tct gcc att tct aaa aat tac cca ttt gtt aac cga aca tct gtg       144
324 Trp Ser Ala Ile Ser Lys Asn Tyr Pro Phe Val Asn Arg Thr Ser Val
325         35                  40                  45
327 atg att aag gat cgc tgg cgg acc atg aaa aag ctt ggc atg aac         189
328 Met Ile Lys Asp Arg Trp Arg Thr Met Lys Lys Leu Gly Met Asn
329     50                  55                  60
332 <210> SEQ ID NO: 12
333 <211> LENGTH: 63
334 <212> TYPE: PRT
335 <213> ORGANISM: Artificial
337 <220> FEATURE:
338 <223> OTHER INFORMATION: synthetic DNA
340 <400> SEQUENCE: 12
342 Glu Asp Ser Thr Thr Asn Ile Thr Lys Arg Gln Lys Trp Thr Val Glu
343 1               5                   10                  15
346 Glu Ser Glu Trp Val Lys Ala Gly Val Gln Lys Tyr Gly Glu Gly Asn
347             20                  25                  30
350 Trp Ser Ala Ile Ser Lys Asn Tyr Pro Phe Val Asn Arg Thr Ser Val
351         35                  40                  45
354 Met Ile Lys Asp Arg Trp Arg Thr Met Lys Lys Leu Gly Met Asn
355     50                  55                  60
358 <210> SEQ ID NO: 13
359 <211> LENGTH: 189
360 <212> TYPE: DNA
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same error in Sequence 14

VERIFICATION SUMMARY   DATE: 09/01/2006
PATENT APPLICATION: **US/10/590,464**   TIME: 11:33:28

Input Set : **A:\PTO.RJ.txt**
Output Set: **N:\CRF4\09012006\J590464.raw**

L:12 M:270 C: Current Application Number differs, Replaced Application Number
L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:32 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:1,Line#:30
L:86 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:3,Line#:84
L:143 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:5,Line#:141
L:200 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:7,Line#:198
L:257 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:9,Line#:255
L:314 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:11,Line#:312
L:371 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:13,Line#:369
L:425 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:15,Line#:423